

R&D PROJECTS AS INSTRUMENTS FOR ENHANCING GENDER EQUALITY IN UNIVERSITIES

PROYECTOS DE I + D COMO INSTRUMENTOS PARA MEJORAR LA IGUALDAD DE GÉNERO EN LAS UNIVERSIDADES

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Abstract

Gender equality, enshrined in European treaties, is one of the fundamental values of the European Union. It is a focal point in today's value systems as well as national, sectorial and organizational policies, and it is also a recurrent theme thoroughly used in current parenting and education strategies. Given that higher education institutions (HEIs) and research centers are considered, in general, to be entities that lead the way in many aspects of our lives, they also represent the focus of our investigation on 'gender balance'. In this paper we look at the Romanian HEIs to determine the level of gender balance in Romanian HEIs in general, and then we concentrate our attention on the Alexandru Ioan Cuza University of Iași (UAIC) as a representative case study for the Romanian HEIs. Finally, we highlight the role that research and development projects may play in promoting gender balance at UAIC. In this regard, the paper employs a multi method approach based on quantitative analyses and interviews. The results reveal that women are well represented in academic and research positions both within the Romanian HEIs and in UAIC, with two exceptions: full professor rank and R&D project manager, these being dominated, in general, by men.

Keywords: gender balance; university; R&D projects; project management; Romania

Resumen

La igualdad de género, consagrada en los tratados europeos, es uno de los valores fundamentales de la Unión Europea. Es un punto focal en los sistemas de valores actuales, así como en las políticas nacionales, sectoriales y organizativas, y también es un tema recurrente que se utiliza a fondo en las estrategias actuales de crianza y educación de los hijos. Dado que las instituciones de educación superior (IES) y los centros de investigación son considerados, en general, como entidades que marcan la pauta en muchos aspectos de nuestras vidas, también representan el centro de nuestra investigación sobre el "equilibrio de género". En este trabajo se analizan las IES rumanas para determinar el nivel de equilibrio de género en las IES rumanas en general, y a continuación centramos nuestra atención en la Universidad Alexandru Ioan Cuza de Iași (UAIC) como caso de estudio representativo para las IES rumanas. En este sentido, el documento emplea un enfoque multi-método basado en análisis cuantitativos y entrevistas. Los resultados revelan que las mujeres están bien representadas en los puestos académicos y de investigación tanto en las IES rumanas como en la UAIC, con dos excepciones: profesora titular y directora de proyectos de I+D, que en general están dominados por hombres.

Palabras clave: equilibrio de género; universidad; proyectos de I + D; gestión de proyectos; Rumania

1. Introduction

Gender equality represents a focal point in today's value systems, in the national, sectorial and organizational policies, and also a leitmotiv thoroughly used in the current parenting and education strategies. The literature focused on this subject is abundant, highlighting gender imbalances in different academic areas, across countries and time.

Although there are various policies, programmes and initiatives that either jointly or individually work towards reducing the gender gaps, the progress is rather slow and we still have a long way to go to achieve full gender equality. In this regard, it is crucial to continuously monitor and draw attention on the situations where imbalances persist. A close eye must be kept also on the good practices and models that must be promoted and leveraged in order to attain gender equality goals.

The higher education institutions (universities) and the research centers are considered, in general, entities that lead the way in technical and social progress (among many other aspects). Therefore, it should not surprise us why these entities in particular represent the focus of many studies that investigate 'gender balance'.

Athena SWAN (Scientific Women's Academic Network) is a charter established in 2005 that recognizes and promotes good practices in higher education and research institutions towards the advancement of gender equality. The logo for the 'HR Strategy for Researchers' is granted to those universities and research institutions that align their human resources policies to the 40 principles of the Charter & Code (European Charter for Researchers and Code of Conduct for the Recruitment of Researchers). The alignment process promotes, among others, a representative gender balance at all staff levels in research and the avoidance of gender based discrimination. These are just two examples of the strategic instruments used in the academic environment not only to promote gender balance in universities and research centers, but also to promptly sanction those entities that deviate from the goals referring to gender balance and equity. Nonetheless, statistics show gender imbalances in the academic environment still exist, especially in some domains/fields and with regard to academic careers and managerial positions (Benschop and Margo, 2003).

The most recent numbers on the subject show that only one third of the EU's researchers are women. In addition, as we look on each step in the academic hierarchy, one can notice that women are less represented (European Commission, 2019). In the EU-28 in 2016, although women represented more than half of the students at various levels (54% of students, 58% of graduates at the B.Sc. and M.Sc. levels and 48% of students and graduates at doctoral level), they become increasingly under-represented compared to men when we look at the standard academic career progresses. In this regard women hold 46% of grade C academic positions (assistant lecturer and lecturer), 40% of grade B (associate professor) and 24% of grade A (full professor). "In the EU-28, the proportion of women among heads of institutions in the higher education sector increased from 20% in 2014 to 22% in 2017. Furthermore, in 2017, women made up 27% of the members of boards of research organisations, while when focusing on board leaders alone, the proportion of women decreased to 20%" (European Commission, 2019, p. 6).

In this paper we look into the Romanian higher education institutions (HEI) to grasp the level of gender balance, we then focus our attention on the Alexandru Ioan Cuza University of Iasi (UAIC) as a representative case study for the Romanian HEIs and then finally highlight the role that projects may play as instruments in promoting gender balance at UAIC.

The remaining of the paper is structured as follows: Section 2 briefly overviews the existing literature on the topic; Section 3 focuses on the European framework and policy approaches with regard to gender balance and sets a structural diagnostic of the gender equality status in Romanian higher education institutions; Section 4 presents the research methodology with a focus on our case study (Alexandru Ioan Cuza University of Iasi); Section 5 presents the results of the quantitative analysis and the discussions on the responses from interviews; Section 6 concludes.

2. Existing research on gender balance

Gender balance or *equality* implies that both women and men participate in a specific activity (including research) or within an organization on an equal footing. When referring to gender as a perspective in research, this implies that biological and social gender is reflected in the content of the research. According to the Research Council of Norway (2014, p. 2) an increasing number of researches show that diversity, including gender balance and gender perspectives, contributes to enhancing the scientific quality and social relevance of a research activity and its products/ deliverables. The same organization highlights that gender balance also receives a considerable amount of attention in European research and innovation policy, this being a key topic in the European Research Area (ERA).

For an overview of the existing research papers and official reports on the gender balance topic, Equileap is a reliable and open source of information. This is a British Organisation aiming to accelerate progress towards gender equality in the workplace, using the power of investments, grants and knowledge. On the topic at hand, Equileap (2018) brings to our attention that a significant number of research papers have highlighted how important gender equality is at many levels, for companies' revenue as well as for countries' economic growth.

An important strand of the existing literature focuses on the impact of gender balance on the business activity and demonstrates that gender balance should be not only a moral and social obligation from our society, but also a critical business strategy component that companies should not ignore. In this regard Calvert Impact Capital (2018) brings to our attention more than a dozen of research papers and reports which reveal that "the financial returns of companies with three or more women on their board are significantly higher than companies that have no women on their board" (2018, p. 4). Also, Williams Woolley *et al.* (2010) point the fact that inclusive work environments "are associated with better organizational outcomes and that gender diverse teams at all levels make better decisions". Another insightful paper is that of Woetzel *et al.* (2015) which estimates that if women would play an identical role to men in the labor force, as much as \$28 trillion could be added to global annual GDP by 2025. A report by McKinsey and Company (2013) states that companies with top quartile representation of women in executive committees in general perform better than companies with no women at the top, with an average estimation of about 47% return on equity.

There is also a significant body of literature that highlights the importance of gender balance in political affairs and calls for a broadening of women's representation in politics. The Global Gender Gap Report (2018) reveals that "inequality is lower in countries where more women have been engaged in public life". Given that the range of issues which women tend to bring forward and prioritize investments on, have broader societal implications (with regard to family life, health and education), this

inherently creates an environment which fosters much more credibility in institutions and produces more democratic outcomes (OECD, 2014). A case study research on India reveals that women in local government positions and in charge with budget decisions (in spite of having significantly lower education and relevant labor market experience) tend to make decisions with better outcomes for the local communities than men do (see Beaman *et al.*, 2009 and Munshi and Rosensweig, 2008). In addition, Ghani *et al.* (2013) brings forward that more equal female representation in political bodies also affects the participation of women in the workforce. In this regard it is believed that more women in politics would enhance supply and demand of employment opportunities for women thus positively impacting labor force participation.

Regarding the core topic of our paper, there are important researches dedicated to analyzing the *status-quo* of gender balance in higher education and science, these mainly focusing on revealing the importance/benefits of female representation in academic and research activities as well as in the governing bodies of such institutions (and the implications of a gender imbalance in this regard), the barriers and real concerns that women have to deal with when entering or working within a university, the activities that these are encouraged to take in etc.

In a study developed by Miller *et al.* (2015), the authors point that over 40 years ago, around 5,000 American and Canadian children were asked to draw a picture of a scientist. The shocking observation was that almost all of these scientists were men and only 28 children (0.6%) depicted a woman scientist. Žalėnienė *et al.* (2016) raised an interesting question in this regard: “Can we expect significant changes in gender roles stereotypes today?”. Holman *et al.* (2018) suggest that the existing work to date clearly highlights that the gender gap is smaller today than it was in the past and that there will be probably and quite soon men and women researchers in equal numbers. Although the number of female academics has been increasing over the years, the university continues to be considered elitist, masculine and patriarchal leading to a very small minority of women professors (Macarie and Moldovan, 2012; Seierstad and Healy, 2012; van den Brink and Benschop, 2012, Kovacheva and Kabaivanov, 2016; Mutu, 2017 and others) and, in addition, there are very few women occupying senior management positions in universities (McTavish and Thomson 2007; Tomàs *et al.* 2010). We believe that the balance tilted more than we think towards a better female representation in higher education and science (given various reasons that will be discussed later on), but much more work has to be done to even bring into discussion the gender balance concept. One must not neglect that there are a wide range of factors that contribute to gender gaps in universities, among which many are of economic, social, political, historical and cultural nature.

Lovenduski (2012) considers that a more balanced representation of women in political decision-making is important not only because it will “make a difference for women” (p. 699) but also because justice demands it. Sherer and Zakaria (2018) carry on with this argument and apply it to companies and higher education institutions. Such organizations that have a high public profile should be seen to be fair and just to women.

Regarding the arguments in favor of a strong female representation in academic and research activities, Žalėnienė *et al.* (2016) point to “general fairness, democracy and credibility, as well as research relevance and quality” (p. 238). In an official report, it is pointed out that only equal participation of both men and women can ensure sufficient diversity and secure the heterogeneity of scientific groups, what is widely recognized as more vigorous and innovative (Committee for Mainstreaming – Women

in Science in Norway, 2008). Lovenduski and Norris (2003) argue that women are better able than men to have an impact on the issues and policies that affect women, including here the ones that have to deal with flexible working, equal pay and workplace behavior. Other reasons brought forward for an equal gender representation in universities refer to: ethical concerns, improved financial performance, increased emphasis given to social and environmental issues, and better reflecting the gender balance of consumers and clients (see also Nielsen and Huse, 2010). Studies have also shown that collective intelligence increases when there is gender balance (see Williams Woolley et al., 2010).

A highly relevant study developed by the European Institute for Gender Equality (EIGE) in 2016 brings forward the most important arguments for and benefits of promoting gender balance in research organisations and higher education institutions. As such, promoting gender equality brings positive impact with respect to (EIGE, 2016, p. 11): compliance with domestic and EU regulations; well-being at work; social dialogue and cooperation among stakeholders; internal decision-making and career management procedures; inclusiveness and the sense of community; the quality of research (and teaching); the overall profile of the organisation in a competitive environment. In itself, only quoting these broad areas of impact can aid in building a strong case for gender equality policies in higher education institutions. The Norwegian Committee for Gender Balance and Diversity in Research (KIF) provides six key arguments on its website for why work on gender equality and diversity in research is relevant. These refer broadly to: fairness; democracy and credibility; national research objectives; research relevance; research quality; competitive advantage (Kifinfo, 2018).

Sherer and Zakaria (2018) recently analyzed the factors affecting the representation of females on governing bodies of UK universities. They found that the proportion of female members of UK university boards is 32%, higher than the corporate sector and similar to Parliament, but unsatisfactory, given that it fails to reflect the percentage of female staff and students at UK universities. In addition, a gender imbalance persists across the sector with some differences between different types of university. At the end, they concluded that it is in the interests of the organisation that there should be an equitable gender balance on the governing bodies of universities.

The study of Alpay *et al.* (2010) looks at female self-perceptions relating to effective research work and career progression. After surveying the literature they identified that among the barriers and real concerns that women have to deal with when entering or working within a university, several possible reasons refer to: "a lack of female role models; implicit gender differences in communication and collaboration styles which may disadvantage females in established, male-dominated groups; subtle forms of discrimination; and the real and perceived challenges associated with balancing a work and family life" (2010, p. 3). The difficulty of achieving a balance between personal (family) and career life is also analyzed by Ward and Wolf-Wendel (2004). They also highlight that the maternity leave disrupts professional trajectories and brings poor performance in research. Other relevant impediments which slow down a woman's professional development refer to: the fear of „stepping in" (studied by Carrington and Pratt, 2003, Winchester *et al.*, 2006), the invisible barriers such as professional autonomy, isolation culture, and faulty management at department level (Bagilhole, 2002), the women's leadership style, different from that of men, so less well-liked (White, 2003; Doherty and Manfredi, 2006; Bagilhole, 2000; Jaba *et al.*, 2016). Alpay *et al.* (2010) also brings forward concerns and beliefs referring to: cultural expectations, self-beliefs, a poor role-identity and occasional gender-linked (stereotypical) interactional behaviors.

3. Gender balance in academia and research

3.1. An overall situation in the EU and policy approaches

Equality between women and men is one of the fundamental values of the European Union (EU), enshrined in the European Treaties. It is also an internationally agreed Sustainable Development Goal. The EU is dedicated not only to defending this core value, but also to promoting it within the Member States and across the world. And it does that through a large body of legislation (13 directives in the field of gender equality being adopted since the Treaty of Rome) and complex initiatives which promote gender equality in areas such as equal pay, work-life balance, health and safety at work, social security, access to goods and services, and protection from human trafficking, gender-based violence and other forms of gender-based crime (European Parliament, 2018).

In this regard, in 2017 the European Commission launched various initiatives to advance gender equality between women and men. Among these initiatives we include (European Commission, 2018): i) the initiative on work-life balance for working parents and careers (a comprehensive package of policy and legal measures, including a proposal for a Directive to modernise EU legislation on family-related leave and flexible working arrangements); ii) the #SayNoStopVaw campaign was launched to promote 2017 as the Year of Focused Actions to End Violence against Women; iii) the 2017-2019 Action Plan to tackle the gender pay gap (a broad and coherent set of 20 actions to be delivered in the next 2 years starting with 2017); iv) the evaluation report on the implementation of the Pay Transparency Recommendation was adopted by the Commission; v) the Annual Fundamental Rights Colloquium on the topic 'Women's Rights in Turbulent Times' was held; vi) the EU launched together with the UN the so-called 'Spotlight Initiative' (having an intended budget of EUR 500 million, the initiative aims to eliminate all forms of violence against women and girls in partner countries from five regions of the world: Asia, Sub-Saharan Africa, Latin America, the Caribbean and the Pacific).

One other important area where EU is equally committed to advancing gender equality is research and innovation. In fact, this is the core aim of the "Strategic engagement for gender equality 2016-2019" (European Commission, 2016), the current framework for the European Commission's work towards full gender equality. The strategy identifies five priority areas, which include the increasing economic independence and participation of women in the labour market, reducing gender pay, earnings and pension gaps and promoting gender equality in decision making. It focuses in particular on: key trends and the newest available data on the Strategic engagement indicators; actions in the EU, focusing on the achievements by EU Member States and the EU institutions; inspiring practices, innovative projects and successful policies.

The European Research Area (ERA) is part of the Europe 2020 strategy. Within ERA, gender equality and gender mainstreaming are key priorities (European Commission, 2012a) for which their promotion is a clear objective and a legal obligation under the EU framework programme for research and innovation. In accordance with the European Commission's 2012 ERA communication, Member States were invited to foster (create a legal and policy environment) and encourage (provide incentives) initiatives that will: "remove legal and other barriers to the recruitment, retention and career progression of female researchers while fully complying with EU law on gender equality; address gender imbalances in decision-making processes; strengthen the gender dimension in research programmes" (European Commission, 2012b).

In line with this, the Council also invites EU Member States to encourage and to provide incentives to higher education institutions and research organisations to revise or develop gender equality plans (GEPs) and to mobilise the resources needed in this regard. In this regard, the European Commission considers a GEP as a set of actions aimed at (European Commission, 2012b): i) conducting impact assessment/audits of procedures and practices to identify gender bias; ii) identifying and implementing innovative strategies to correct any bias; iii) setting targets and monitoring progress via indicators

In addition, gender equality is a cross-cutting issue in Horizon 2020 (European Commission, 2013). In general, the programme aims to promote gender balance in research teams, panels and advisory groups and to integrate the gender dimension in research and innovation (R&I) content (see also the three main objectives that underpin the European Commission's strategy). In particular, the work programme entitled 'Science with and for Society' aims at encouraging specific initiatives that support the gender equality policy.

The "She Figures" publication series presents the level of progress made towards gender equality in research and innovation in Europe, every three years. Since 2003, the team working at the report has "monitored new developments related to careers, decision-making and, most recently, how the gender dimension is considered in research and innovation content". It aims to give an overview of the gender equality situation, using a wide range of indicators to examine the impact and effectiveness of policies implemented in this area. In the 2015 edition of the publication, right from the very beginning, the European Commissioner for Research, Science and Innovation highlights in the Foreword section the following: "More and more, European women are excelling in higher education, and yet, women represent only a third of researchers and around a fifth of grade A, top-level academics. Although the number of female heads of higher education institutions rose from 15,5 % in 2010 to 20 % in 2014, there is clearly still a long way to go before we reach gender equality in European research and innovation professions" (European Commission, 2016, p. 3). Three years later, the efforts made at EU level in ensuring gender equality started to pay off. "Today, women are actually a majority among PhD graduates. The proportion of women in the senior academic ranks has also been on the increase in Europe and the EU has established itself as world leader in integrating the gender dimension in research. There is progress but it is slow. And we still have a long way to go to achieve full gender equality." (European Commission, 2019, p. 4).

In 2014, the European Commission published a report entitled "Gender Equality in Horizon 2020" (Office of the European Union, Luxembourg). This serves as a guide that provides the Commission/agency staff, potential applicants, the Helsinki group, national contact points, expert evaluators and other actors involved in the implementation of Horizon 2020 some practical directions on the effective application of the current gender equality provisions. As such, it recommends integrating gender equality issues at each stage of the research cycle: from planning through implementation, monitoring and programme evaluation. The *Charters for researcher* mentions that employers and funders "should aim to provide working conditions which allow both women and men researchers to combine family and work, children and career. Particular attention should be on flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions" (European Communities, 2005, p. 17). With regard to gender balance, the code stipulates that "Employers and funders should aim for a representative gender balance at all levels of staff, including at supervisory

and managerial level. This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance” (European Communities, 2005, p. 18).

Other EU initiatives with a focus on gender balance are: EGERA-Effective gender equality in research and the academia; FESTA-Female empowerment in science and technology academia; GARCIA-Gendering the academy and research: combating career instability and asymmetries; GENERIS-Gender equality network in the European research area; GENIS LAB-Gender in science and technology laboratory; GENOVATE-Transforming organizational culture for gender equality in research and innovation; INTEGER-Institutional transformation for effecting gender equality in research; LIBRA-Leading innovative measures to reach gender balance in research activities; TRIGGER-Transforming institutions by gendering contents and gaining equality in research (European Institute for Gender Equality, 2016).

National contexts determine to an important extent the state-of-play as regarding gender equality in research. Country specific information on legislative, policy backgrounds and other support measures to promote gender equality in research, for each of the European Union Member States may be found. Our University was partner of the EU-funded structural change project Structural Change Toward Gender Equality in Science (STAGES). The main objectives were to increase the public visibility of the scientific performances of women researchers and to promote female research with role models, to create an international reach for the exchange of good practices, and to contribute to the professional development of women researchers. One such event takes place on the same day as the European Women Researchers Day as a form of enacting transnational and inter-institutional cooperation for promoting shared objectives of gender equality in science through the organization of mutually beneficial common actions and its dissemination at international level by networking channels.

3.2. Gender equality in Romanian Higher Education Institutions

In Romania, although the law states that the equality between men and women means “taking in consideration the different capacities, needs and aspirations of men and women and their equal treatment”, there is nonetheless a great gender imbalance, placing the woman on a lower position than the man. In 2015, the World Economic Forum’s statistics on equality of chances between men and women place Romania last in the European Union and 77th worldwide (with a score of 0.693). When looking into the data referring to 2016, within the country’s Parliament only 12% of Romania’s lawmakers are women. Only 53 of the 383 deputies and 12 out of the 167 senators were women. With regard to the existing research in gender balance in Romanian Universities, this is very limited. A representative work in this sense is that of Văcărescu (2012) where she investigates “some of the institutional mechanisms, transnational higher education structures and interests, and personal investments and strategies that shape the current configuration of gender studies generally in higher education in Romania and particularly at the University of Bucharest”.

In her paper Văcărescu (2012) signals that women make up less than half of the teaching staff in higher education institutions in Romania, but there is an overall increase by approximately 7% (from 40,1% in 2001 to 47,1% in 2009) during the last decade prior to 2010. In the same paper, the author highlights that there are significant asymmetries between women and men, both regarding academic titles and management positions. As women hold more than half of the two lowest academic

titles (54%-58% teaching assistants and 51%-56% assistant lecturers during the period under consideration), less than one third of full professorships is held by women, with an increase by 10% during the period 2001-2010 (from 17,4% in 2001 to 28,3% in 2009). An even higher augmentation of women's percentage is observable during the past decade for associate professor title, where the increase in women holding this position is almost 14% (see Table and Văcărescu, 2012).

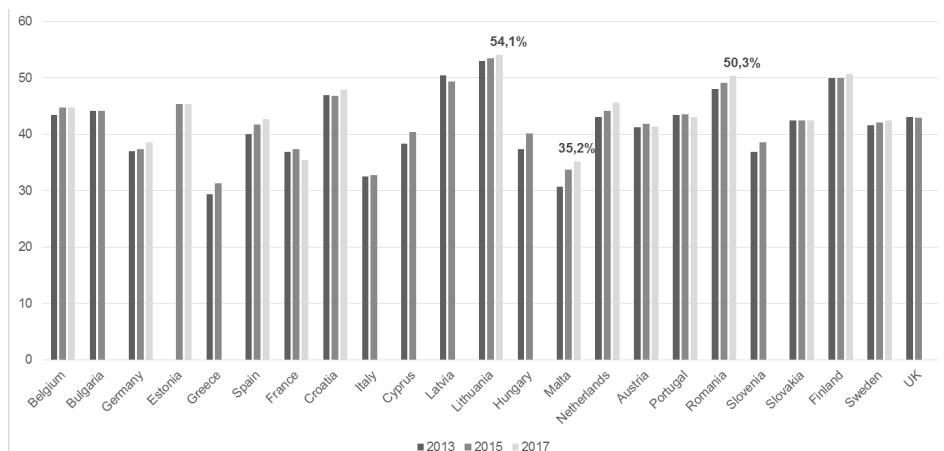
Table 1. Evolution of women in higher education institutions in Romania, 2001-2017

Year	Total	F(%)	Prof.	F(%)	Assoc.	F(%)	Lect.	F(%)	Assist.	F(%)	Teach	F(%)
2016/ 2017	32.043	50,8	5.527	-	6.663	-	12.480	-	7.368	-	5	-
2015/ 2016	30.977	50,0	5.344	-	5.971	-	12.033	-	7.554	-	75	-
2014/ 2015	28.876	49,4	5.081	-	5.876	-	10.628	-	6.895	-	396	-
2013/ 2014	27.900	49,0	4.425	30,2	5.988	46,2	10.111	52,8	6.671	56,9	705	60,1
2012/ 2013	27.335	48,7	4.209	30,9	5.475	45,3	9.517	51,8	7.109	56,3	1.025	57,9
2009/ 2010	25.662	47,1	5.082	28,3	4.867	44,5	7.149	50,1	6.739	56,7	1.825	58,7
2004/ 2005	25.965	42,8	5.057	20,9	4.285	38,2	6.844	45,7	6.725	54,5	3.054	53,2
2001/ 2002	24.301	40,1	4.356	17,4	3.852	30,8	7.068	43,5	5.987	51,5	3.038	54,3

Notes: The academic hierarchy in Romanian higher education institutions is made up of five titles, from the lowest to the highest as follows: 'Teach.' (Teaching assistant), 'Assist.' (Assistant lecturer), 'Lect.' (Lecturer), 'Assoc.' (Associate professor), 'Prof.' (Professor). Starting with the academic year 2014/2015, detailed data on the gender distribution of HEI staff on teaching positions are no longer available. The data does not consider consultant teachers and teaching staff with research workload.

Source: Văcărescu (2012) for the period 2001-2010 and compiled data by the authors from various reports for the remaining period

When analyzing the data for the next two academic years (2012/2013 and 2013/2014) one can easily notice that the trend was maintained, although the increase of women in the total teaching staff account by less than 1% each year (a slower growth rate). The same observation is valid for the next three academic years for which data is available. Moreover, women continue to hold more than half of the lowest academic titles (60% teaching assistants and around 57% assistant lecturers), and register a substantial increase for associate professor titles (reaching 46,2%). The latest academic year analyzed (2016/2017) clearly highlights that women have taken over the podium and exceed the number of men in teaching staff positions.

Figure 1. Distribution of women academic staff in higher education institutions in the EU

Source: developed by authors using data extracted from Eurostat database

When compared to the situation in the other EU countries (23 EU countries for which data was available) one can notice that Romania has an excellent position for the three years under consideration. The highest value for the percentage of female staff in higher education institutions in 2017 is in Lithuania (54,1%), occupying the first position for all of the three years, while the lowest one is in Malta (35,2%). Only Finland exceeds Romania's score and registers 50,7% of female staff in 2017 (leaving Romania on the third place).

The 2015 edition of the 'She Figures' report reveals that a range of gender differences and inequalities still exists in research and innovation in the EU. When referring to researchers, the representation of women and men is uneven. The latest data showed that women in the EU accounted for only 33 % of researchers (EU-28) in 2011, with a stronger presence in the higher education institutions (41,0%) and government bodies (41,6%). When investigating the gender unbalances in the higher education sector among the EU countries we noticed that the differences are not as pronounced as in the government and business enterprise sectors. The majority of countries have a proportion of women researchers in HEIs that is above 40 %. In fact, for nine of the EU countries there is an increasing trend towards gender balance in the representation of researchers, with a proportion of women researchers between 45 % and 55 %. With regard to the compound annual growth rate in the higher education sectors of the EU-28, the level for women researchers surpassed that of men researchers by 2 percentage points (4,4 % for women compared to a rate of 2,3 % for men). In the case of Romania, the rate for women researchers is 6,4% while the rate for men researchers is 2,9%. Hence, the data suggests that the number of women researchers grew at a faster rate in Romania than that of men researchers between 2005 and 2012, contributing in this regard to a reduction in the gender gap among researchers in Romanian HEIs.

4. Research Methodology

Established in 1860, Alexandru Ioan Cuza University of Iasi (UAIC) is a non-profit public higher education institution located in the urban setting of the small city of Iasi (population range of 250.000-499.999 inhabitants). Officially accredited and/or

recognized by the Ministry of Education and Research (Romania), UAIC is a very large coeducational higher education institution, accounting for 23.000 students. UAIC offers courses and programs leading to officially recognized higher education degrees such as bachelor degrees, master degrees, doctorate degrees in several areas of study. This old higher-education institution has a selective admission policy based on students' past academic record and grades. The admission rate range is 60-70% making this Romanian higher education organization a somewhat selective institution. International applicants are eligible to apply for enrollment (UniRank, 2019). With regarding the teaching staff it accounts for 742 full-time academic staff and 623 associated professors. UAIC will thus be the main focus of our analysis.

After analyzing the funds attracted by state universities through European projects within the programming period 2007-2013 (Structural Funds), we noticed that UAIC held 7th place (with 80 projects totaling more than 50 million euro). Within this financing line, the Operational Sectorial Programme Human Resources Development brought UAIC funds totaling around 41 million euro and the highest number of projects financed (70 projects). One of the 80 projects was implemented by the Ministry of Education and Research and did not had a local team within the University. All the other 79 projects had a management team with staff members from UAIC. We looked into the data referring to the 79 financed projects (implemented up until the end of 2015), as these projects can be regarded as instruments for fostering gender balance in the university.

The current paper employs a multi method approach consisting in: (a) an inventory and analysis of the UAIC staff in the last five years and within the 79 projects implemented in the institution within the period 2007-2015; (b) 10 interviews with women academics from the Alexandru Ioan Cuza University and working as project managers in the above mentioned projects.

When analyzing the projects we look for gender balance: (a) within the project managers and assistant managers, (b) financial responsible and (c) other team members. In doing so, we observe the presence of men and women in the data collection.

In particular, with regard to the interviews, these included questions about: (a) the difficulties encountered by women in gaining the PM position and in carrying out their tasks during the project, if any; (b) the barriers that women have to overcome when applying for such a position within an existing project or applying for financing with a project proposal where they hold a PM position; (c) the existence of gender discrimination in the university where they work and have to implement the project; (d) recommending measures to ensure the existence of equal opportunities in promotion on positions such as PMs. Among these, we looked for potential career barriers created by the existence of children in the home, we pondered on the ability of women to maintain the same productivity of research as men, we tried to figure the perception of women on the balance between home and work for men, and the perception of the impact of children on career advancement for women.

5. Results and discussions

5.1. Results of the quantitative analysis

The first step we took was to look into the data with regard to the general distribution of the academic staff (with permanent contracts) by gender and title at the Alexandru Ioan Cuza University of Iasi (UAIC), within the period 2015-2019 (data at the beginning of each year). The trend noticed in the higher education institutions in Romania is

overall valid for UAIC as well. Although the total number of academic staff at UAIC was somehow volatile in the last five years (with values ranging from 698 in 2018 to 741 in 2015), the presence of women within the staff grew continuously in the same period (from 40,9% in 2015 to 42,6% in 2019). Nonetheless, one can notice that the scale is unbalanced and favors more the men within the total academic staff.

Table 2. Academic staff by title and gender at UAIC, in 2015-2019

Year	Total	F(%)	Prof.	F(%)	Assoc.	F(%)	Lect.	F(%)	Assist.	F(%)	Teach	F(%)
2019	732	42,6	160	31,9	236	43,2	272	46,0	64	53,1	0	0,0
2018	698	41,4	177	32,2	233	42,9	256	43,8	32	62,5	0	0,0
2017	705	41,1	180	31,7	224	42,0	259	44,0	42	59,5	0	0,0
2016	715	41,1	178	30,9	208	41,8	259	42,9	69	58,0	1	100
2015	741	40,9	171	29,8	206	41,7	262	42,4	94	53,2	8	62,5

Notes: The data refers to full-time academic staff (associated staff have been overlooked due to lack of data). The academic hierarchy in Romanian HEIs is made up of five titles, from the lowest to the highest as follows: 'Teach.' (Teaching assistant), 'Assist.' (Assistant lecturer or Assistant professor), 'Lect.' (Lecturer), 'Assoc.' (Associate professor), 'Prof.' (Professor or Full Professor).

Source: data supplied by the UAIC human resources department and compiled by authors

Within the distribution by academic titles and gender (and disregarding the teaching assistant position for which the data is insufficient to draw sound conclusions) at UAIC, one can notice significant asymmetries between women and men regarding academic titles (see Table). Yet again (as in the overall Romanian HEI) women hold more than half for the lowest academic title (53,1% - 62,5% for teaching assistants) and is barely approaching the next one (42,4% - 46,0% for lecturers). With regard to the top academic titles the highest relative value is registered in the beginning of 2019 for associate professors (of 43,2%) and in 2018 for full professors (32,2%). Overall, although one cannot deny the small increase of women in the top two positions (especially in the last years), there is nonetheless a larger concentration of women at the bottom of the academic titles hierarchy. Hence, as women progress through their academic career, they become increasingly under-represented compared to men. As time will pass and these will be promoted (last two positions), we hope to attain a more balance academic staff at our University.

Table 3. Support and research staff by contract and gender at UAIC, in 2015-2019

Year	Support staff	F(%)	Resear- chers - FTE	F(%)	Research projects - TM	F(%)	Development projects - TM	F(%)
2019	479	70,6	95	53,7	209	45,9	213	59,6
2018	513	69,8	91	54,9	137	39,4	127	61,4
2017	506	69,4	94	52,1	154	42,9	109	58,7
2016	497	68,2	95	51,6	253	40,7	87	64,4
2015	466	69,3	83	55,4	197	42,6	266	59,8

Notes: The data refers to full-time support staff, researchers employed either with full time contracts (FTE) or temporary contracts (TM) within various projects, as well as staff employed within development projects on temporary basis (TM).

Source: authors

When looking into the data for the support staff within UAIC, as well as the staff employed in various development projects not focused on research activities but more on investments, production etc. (with temporary contracts), we noticed an astonishing presence of women among those employed. In this regard, the observation made in the She Figures 2015 report is also valuable for UAIC, in the sense that: “In the higher education sector in most countries, men are more likely than women to be employed as researchers, whereas women are more likely than men to be employed as other supporting staff or technicians” (European Commission, 2016, p. 50). In our case, the proportion of women working as support staff exceeded the corresponding proportion for men, these being present in higher numbers in the top two academic positions. The same observation is valuable for the EU business sector too. Within the business enterprise sector in almost all countries, the proportion of women occupying other supporting staff positions among all women R&D personnel is larger than the corresponding proportion for men, while the opposite is observed for researcher positions (European Commission, 2016, p. 54).

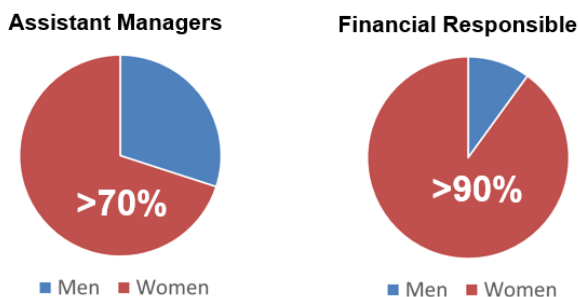
With regard to the research positions as full time employees, women become increasingly represented compared to men, surpassing in all the analyzed years the 50% threshold (despite the fact that the actual numbers are quite small, ranging from 46 women in 2015 to 51 women in 2019). This somehow comes in contradiction with the general observation made earlier in the She Figures 2015 report. At UAIC women are more likely than men to be employed as researchers with full time contracts. As temporary employees, the statement made in the European report is confirmed. It seems that, as temporary employees women are less likely than men to be employed as researchers.

As we turn and look into the 79 projects implemented at UAIC within the 2007- 2015 period, we noticed a very high proportion of men working as project managers that exceeds the corresponding proportion for women (see Table). In relative values, only around 30% of the project manager positions are held by women and most of them (about 68%) have at least a mid-level UAIC position (probably one of the most important criteria that helped these women attain the upper level position within the analyzed projects). The other approximately 70% of project managers are men and less than half of them (44%) have at least a mid-level position within the University. When looking at the other two important positions within a project under the leadership of the manager (assistant manager and financial responsible) we noticed that the balance tilts in favor of women. As such, these occupy more than 70% of the assistant manager positions and more than 90% of the financial responsible positions (see Figure below).

Table 4. Results of the analysis performed on the 79 projects implemented at UAIC

Women	Men
* 25 Project Managers (PM) ≈ 32%	* 54 Project Managers (PM) ≈ 68%
* 68% of women PMs have a mid-level UAIC position	* 44% of men PMs have a mid-level UAIC position
* the average budget of projects managed by women PMs - 4.8 million lei	* the average budget of projects managed by men PM - 8.5 million lei

Figure 2. Distribution of assistant managers and financial responsible by gender in the 79 projects implemented in UAIC



As for the budgets of these projects (totaling slightly below 50 million euro), we noticed that the average budget of projects managed by women PMs is around 4.8 mil lei (approx. 1 mil euro), while the budget of projects managed by men PMs is around 8.5 mil lei (approx. 1,8 mil euro).

In conclusion, when analyzing the projects implemented at UAIC we argue that, men are more likely than women to be employed as project managers, whereas women are more likely than men to be employed as assistant managers or financial responsible. In addition, women PMs are more likely than men PMs to have at least a mid-level position within the University while the projects managed by men PMs are more likely to have higher budgets than the projects managed by women PMs.

5.2. Discussions on the responses from interviews

We selected 10 out of the 25 women project managers (40% representativeness) to be part in our second analysis based on semi-structured interviews. Before performing the interviews we analyzed their academic profile and resume. Before each interview (performed in a controlled environment) we presented the draft results of our first analysis as an anchor in our future discussions.

The overall analysis revealed as the following strengths that women PMs at UAIC have, in general:

- they have a sound experience in the academic life as a result of continuous involvement in various activities within the university (“I was in the front line”)
- most of the women have performed studies or internships abroad (not only outside the University, but outside the country)
- many of the interviewed women PMs have declared that they benefited from a favorable context, in the sense that, at the time of the elections for PM positions, there were few people to choose from that had the title of full Professor (and that were willing to occupy the position of PM)
- many of the interviewed women PMs had as a mentor a Professor which, in turn, had a leading/managerial position within the University (and that recommended his/her disciple for the position of PM)
- another other strong feature that was brought into the discussions was the presence of specific leadership skills and abilities: leadership, coordination, organization, collaborative attitude, stress resilience (skills and abilities which were first nurtured through various courses and training sessions and then capitalized and improved in various small projects and tasks)

- some other relevant aspects that leveraged women in their position of PMs in various projects at UAIC were: strong ties with stakeholders involved in projects, especially in those projects where UAIC was partner; having a strong professional background on a scientific niche towards which projects were directed; previous involvement in various internal projects on a similar domain (e.g., acting as member in mixed committees at a regional level).

Another aspect that we focused upon was the barriers that women were confronted with in their process of applying for the position of project manager. The following main ideas were drawn:

- in general, there are no important barriers (at least in a declarative manner)
- they experienced a fierce competition, given the masculine culture / “a world of men” within the University (and in the Romanian higher education system in general), and the fact that they always had to prove themselves that they were capable of performing a specific task
- the positioning in certain (informal) groups of influence or lobbying was a strong point for those who could do that; sometimes you have to struggle to be informed (about projects, conferences, publishing opportunities)
- an important issues was the preconception of others (the idea that a man is doing better in such positions, because the past has shown that men are good leaders) which inclined those in charge to choose the less risky path (a men as PM)
- the management style was an important criteria when choosing between a man and a woman as PM: women are more cautious and less inclined to take risks, which is also very necessary at certain points
- the women PMs noticed a preference for men as PMs given their possibility to represent the project’s interests in the upper circles of the University (a better position of the man PM would lead to a sounder leverage in favor of the project)
- family life is one very important aspect mentioned by all of the women PMs: if not aided within the personal life (generally by parents, grandparents, not necessarily husband), it would be very difficult for women to perform as PMs (one must not forget that they also have a teaching / research career to upkeep in accordance with their title and contract).

“Why are women so few in a leading position within UAIC in general, and within projects in particular?” was another question raised during the interview. It seems that this criterion is not relevant; depends on the number of women who have reached a certain career level which can allow them to access a leading position. The managerial career of a woman is generally shorter, given the tendency to renounce the position held after a mandate, because of the difficulties encountered and in favor of the teaching / research career. In addition, it looks like not many want a leading position in the first place.

6. Conclusions

Gender equality is one of the fundamental values of the European Union (EU), enshrined in the European Treaties. The EU is dedicated not only to defending this core value, but also to promoting it within the Member States and across the world. There is an abundant literature that focuses on the impact of gender balance on the

social, cultural, political and business life and highlights that gender equality should be not only a moral obligation from our society, but also a commonsense. As higher education institutions (universities) and research centers are considered, in general, to be entities that lead the way in many aspects of our life (technical and social progress among others), these also represented the focal point of our investigation on 'gender balance'.

After briefly surveying the existing literature on the topic and grasping the EU's position in terms of policies and initiatives, the paper provides a general overview with regard to the alignment of the Romanian higher education institutions (HEI) to the gender balance goals. The focus of the paper is then placed on the Alexandru Ioan Cuza University of Iasi (UAIC) as a representative case study for the Romanian HEIs. Using data provided by this institution, we look for gender balance among the academic, research and support staff. The research question that gave our motivation for this paper was mainly: "Can projects be considered efficient instruments in assuring gender balance in the academic environment?".

In addition to the official reports that gave us the numbers for the staff in the Romanian higher education institutions (HEI) and the data provided by UAIC which enabled us to look for gender balance within the institution, the paper uses data from 79 research and development projects implemented in the institution within the period 2007-2015 (an exhaustive list). When analyzing the projects we looked for gender balance: (a) within the project managers and assistant managers, (b) financial responsible and (c) other team members. Moreover, we performed 10 interviews with women academics from UAIC and that have worked as project managers in the above mentioned projects.

The quantitative analysis on the 79 relevant projects for UAIC clearly highlights that men are more likely than women to be employed as project managers, whereas women are more likely than men to be employed as assistant managers or financial responsible. In addition, women PMs are more likely than men PMs to have at least a mid-level position within the University while the projects managed by men PMs are more likely to have higher budgets than the projects managed by women PMs. The fact that projects represent a temporary commitment to the University (fixed-term contracts as opposed to full time contracts), this diminished the occurrence of certain barriers that women have to deal with when accessing PMs positions (related to the lack of self-confidence of taking the managerial position or dealing with the specific tasks). Teamwork was also considered a relevant factor in the women's involvement as PMs.

The qualitative analysis focused on the strengths that women PMs at UAIC have and on the barriers that women are confronted with in their process of attaining the position of project manager. The discussions within the interviews revealed that the gender gap within UAIC is not determined by the phenomenon of discrimination, but is rather of a contextual type (prioritization of personal goals, external pressures of professional life).

With regard to our research questions, we strongly believe that research and development projects can be considered efficient instruments in promoting and achieving gender balance in the academic environment at UAIC as long as the selection pool is also gender balanced (and we highlighted that there is a tendency in this regard in the upcoming years), there is a will among women academics to occupy such a position (despite the rather irrelevant barriers that informally exist but which women are willing to overcome with minimum efforts) and there is a favorable context which motivate them to access a PM position.

Summarizing, we believe that project management can be considered a useful tool in promoting gender equality policies at universities. Occupying the position of Project Manager by people who did not have managerial positions up until that point (in general these being women and young people) can be considered a career booster for people with genuine managerial skills, but which encountered some barriers, at a certain point, indicated by the existing studies on the 'gender equality' topic.

Formalizing the process of appointing project managers at the organizational level (with a reflection of the competences in the types of project activities, avoiding in this sense a possible subjective selection process which would disregard women), would allow a better distribution of managerial responsibilities among the academic staff in the University and could be used as a powerful mechanism to accelerate the progresses in terms of gender equality goals.

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References

- Alpay, E. Hari, A., Kambouri, M., & Ahearn, A. L. (2010). Gender issues in the university research environment. *European Journal of Engineering Education*, 35 (2), pp. 135-145. DOI: 10.1080/03043790903497302
- Bagilhole, B. (2000). Too Little Too Late? An Assessment of National Initiatives for Women Academics in the British University System. *Higher Education in Europe*, 25 (2), pp. 139-145.
- Bagilhole, B. (2002). Academia and the reproduction of unequal opportunities for women. *Science Studies*, 15 (1), pp.46-60.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., & Topalova, P. (2009). Powerful Women: Does Exposure Reduce Bias?. *The Quarterly Journal of Economics*, 124 (4), pp. 1497-1540. DOI: 10.1162/qjec.2009.124.4.1497
- Benschop, Y., & Margo, B. (2003). Crumbling Ivory Towers: Academic Organizing and its Gender Effects. *Gender, Work & Organization*, 10 (2), pp. 194-212. DOI: 10.1111/1468-0432.t01-1-00011
- Calvert Impact Capital (2018). Just Good Investing. Why gender matters to your portfolio and what you can do about it. Retrieved from <https://www.calvertimpactcapital.org/storage/documents/calvert-impact-capital-gender-report.pdf>
- Carrington, K., & Pratt, A. (2003). How Far Have We Come? Gender Disparities in the Australian Higher Education System. Information and Research Services, Department of the Parliamentary Library, Current Issues Brief No. 31 2002–03.
- Committee for Mainstreaming – Women in Science in Norway (2008). Gender balance in academia – golden opportunities: final report 2004-2007. Retrieved from <http://eng.kifinfo.no/binfil/download.php?did=6086>.

- Doherty, L., & Manfredi, S. (2006). Women's progression to senior positions in English universities. *Employee Relations*, 28 (6), pp. 553-572.
- Equileap (2018). Accelerating progress towards gender equality in the workplace. Retrieved from <https://equileap.org/>.
- European Commission (2012a). Communication on 'A Reinforced European Research Area Partnership for Excellence and Growth', COM 392 final, Brussels. Retrieved from <http://ec.europa.eu/transparency/regdoc/rep/1/2012/EN/1-2012-392-EN-F1-1.Pdf>
- European Commission (2012b). A Reinforced European Research Area Partnership for Excellence and Growth. Retrieved from http://ec.europa.eu/research/era/pdf/era-communication/era-communication_en.pdf
- European Commission (2013). Regulation (EU) no 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/fp/h2020-eu-establact_en.pdf
- European Commission (2016). She Figures 2015. Retrieved from <https://data.europa.eu/euodp/data/dataset/she-figures-2015-gender-in-research-and-innovation>
- European Commission (2018). 2018 Report on equality between women and men in the EU, Luxembourg: Publications Office of the European Union.
- European Commission (2019). She Figures 2018. Retrieved from <https://ec.europa.eu/info/publications/she-figures-handbook-2018>
- European Communities (2005). The European Charter for Researchers. The Code of Conduct for the Recruitment of Researchers, Luxembourg.
- European Institute for Gender Equality - EIGE (2016). Gender Equality in Academia and research. GEAR tool. Vilnius: European Institute for Gender Equality. Retrieved from https://eige.europa.eu/sites/default/files/2016.5791_eige_gender_equality_in_academia.pdf
- European Parliament (2018). Fact sheets on the European Union: Equality between men and women, Brussels. Retrieved from www.europarl.europa.eu/ftu/pdf/en/FTU_2.3.8.pdf
- Ghani, E., Mani, A., & O'Connell, S.D. (2013). Can Political Empowerment Help Economic Empowerment- Women Leaders and Female Labor Force Participation in India. World bank policy research working paper No. 6675
- Holman, L., Stuart-Fox, D., & Hauser, C. E. (2018). The gender gap in science: How long until women are equally represented?. *PLoS Biol*, 16 (4). DOI: 10.1371/journal.pbio.2004956
- Jaba, E., Chirianu, I.-A., Balan, C. B., Robu, I.-B., Roman, M. D. (2016). The analysis of the effect of women's participation in the labor market on fertility in European Union countries using welfare state models. *Economic computation and economic cybernetics studies and research*, 50(1), pp. 69-84.
- Kifinfo (2018). Committee for Gender Balance and Diversity in Research (KIF) 2018-2021. Retrieved from <http://kifinfo.no/en/content/committee-gender-balance-and-diversity-research-kif-0>

- Kovacheva, S. & Kabaivanov, S. (2016). Differences and Inequalities in Civic Participation among Bulgarian Youth. *Sociology and Anthropology*, 4(4), pp. 228-240. DOI: <https://doi.org/10.13189/sa.2016.040405>
- Lovenduski, J. (2012). Feminising British Politics. *The Political Quarterly*, 83 (4), pp. 697-702.
- Lovenduski, J., & Norris, P. (2003). Westminster Women: The Politics of Presence. *Political Studies*, 51 (1), pp. 84-102.
- Macarie, F., & Moldovan, O. (2012). Are Universities Role Models for Communities? A Gender Perspective. *Transylvanian Review of Administrative Sciences*, Special Issue, pp. 81-97.
- McKinsey & Company (2013). Women Matter 2013. Retrieved from <http://www.gbaforwomen.org/download/women-matter-2013/>
- McTavish, D., & Thomson, E. (2007). Managing Scottish higher and further education. *Public Management Review*, 9 (3), pp. 421-433.
- Miller, D. I., Eagly, A. H., & Linn, M. C. (2015). Berkeley Women's Representation in Science Predicts National Gender-Science Stereotypes: Evidence From 66 Nations. *Journal of Educational Psychology*, 107 (3), pp. 631-644.
- Munshi, K., & Rosensweig, R. (2008). The Efficacy of Parochial Politics: Caste, Commitment, and Competence in Indian Local Governments. Center Discussion Paper No. 964. Economic Growth Center, Yale University. Retrieved from http://www.econ.yale.edu/growth_pdf/cdp964.pdf.
- Mutu, A. (2017). Gender Activism in the Higher Education Sector. Forum Gender and Intersectional Activism: Coalition-Building for a More Tolerant Society, organized by the Organization for Security and Co-operation in Europe (OSCE), and the Office for Democratic Institutions and Human Rights (ODIHR), Barcelona. 21-23 June, 2017.
- Nielsen, S., & Huse, M. (2010). The Contribution of Women on Boards of Directors: Going Beyond the Surface. *Corporate Governance: An International Review*, 18 (2), pp. 136-148.
- OECD (2014). Women, Government and Policy Making in OECD Countries - Fostering Diversity for Inclusive Growth. Retrieved from <http://www.oecd.org/gov/women-government-and-policy-making.htm>
- Research Council of Norway (2014). Gender balance and gender perspectives in research and innovation. Policy for the Research Council of Norway 2013 – 2017. Retrieved from <https://genderedinnovations.stanford.edu/Norway2014Policy.pdf>
- Seierstad, C., & Healy, G. (2012). Women's equality in the Scandinavian academy: a distant dream?. *Work, employment and society*, 26(2), pp. 296-313.
- Sherer, M. J., & Zakaria, I. (2018). Mind that gap! An investigation of gender imbalance on the governing bodies of UK universities. *Studies in Higher Education*, 43 (4), pp. 719-736, DOI: 10.1080/03075079.2016.1196352.
- The Global Gender Gap Report (2018). The Case for Gender Equality. Retrieved from <http://reports.weforum.org/global-gender-gap-report-2015/the-case-for-gender-equality/#view/fn-13>

- Tomàs, M., Lavie, J. M., Mar Duran, M. del, & Guillaumon, C. (2010). Women in Academic Administration at the University. *Educational Management Administration & Leadership*, 38(4), pp. 487-498. DOI: 10.1177/1741143210368266
- UniRank (2019). Universitatea Alexandru Ioan Cuza. Retrieved from <https://www.4icu.org/reviews/3938.htm>
- Văcărescu, T. E. (2012). (Un)Fashionable Disciplines: Gender Studies in Higher Education in Romania. Integration or Autonomy?. *Romanian Journal of Society and Politics*, 7 (2), pp. 25-63.
- van den Brink, M., & Benschop, Y. (2012). Slaying the Seven-Headed Dragon: The Quest for Gender Change in Academia. *Gender, Work and Organization*, (19) 1, pp. 71-92.
- Ward, K., & Wolf-Wendel, L. (2004). Academic motherhood: managing complex roles in research university. *The Review of Higher Education*, 27 (2), pp. 233-257.
- White, K. (2003). Women and Leadership in Higher Education in Australia. *Tertiary Education and Management*, 9, pp. 45-60.
- Williams Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010). Evidence for a Collective Intelligence Factor in the Performance of Human Groups. *Science*, 330 (6004), pp. 686-688.
- Winchester, H., Lorenzo, S., Browning, L., & Chesterman C. (2006). Academic women's promotions in Australian universities. *Employee Relations*, 28 (6), pp. 505-522.
- Woetzel, Jonathan, et al. (2005). The power of parity: How advancing women's equality can add \$12 trillion to global growth. McKinsey Global Institute, Retrieved from <https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth>
- Žalėnienė, I., Krinickienė, E., Tvaronaviciene, A., & Lobacevskyte, A. (2016). Gender equality and its implementation in universities of Lithuania. *Economics and Sociology*, 9 (1), pp. 237-251.